

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 23, 2023

Lisa Mathias Registration Specialist Winfield Solutions, LLC P.O. Box 64589 St. Paul, MN 55164-0589

Subject: Registration Review Label Amendments Incorporating Mitigation from the Fish and Wildlife Services (FWS) and the National Marine Fisheries Services (NMFS) Biological Opinions on the Effects of Malathion on Endangered and Threatened Species and Designated Critical Habitat *Product Name*: Malathion 5 *EPA Registration Number*: 9779-5 *Application Dates*: 6/10/2022 and 9/13/2022 *Decision Numbers*: 585236 and 587472

Dear Lisa Mathias:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the FWS and NMFS' Biological Opinions on the effects of malathion on federally listed endangered and threatened species and designated critical habitat in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40

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CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions, please contact Carolyn Smith by phone at (202) 566-2273 or via email at <u>smith.carolyn@epa.gov</u>.

Sincerely,

flyth

Kelly Sherman Chief, Risk Management Implementation Branch 3 Pesticide Re-evaluation Division Office of Pesticide Programs

Enclosure

# Malathion 5 An Emulsifiable Concentrate

#### **ACTIVE INGREDIENT**

Malathion (0,0-dimethyl phosphorodithioate of	
diethyl mercaptosuccinate)	56.8%
OTHER INGREDIENTS*	<u>43.2%</u>
TOTAL	

Contains 5 pounds malathion per gallon. \*Contains 35.2% of Xylene range aromatic solvent.

# **KEEP OUT OF REACH OF CHILDREN**

# WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

	FIRST AID
	ORGANOPHOSPHATE
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>
	• Remove contact lenses, if present, after the first 5 minutes, then continue
	rinsing eye.
	Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air.
	• If person is not breathing, call 911 or ambulance, then give artificial
	respiration, preferably mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
IF SWALLOWED	Immediately call a poison control center or doctor.
	• Do not induce vomiting unless told to by a poison control center or doctor.
	Do not give any liquid to the person.
	Do not give anything by mouth to an unconscious person.
Have the product c	ontainer or label with you when calling a poison control center or doctor, or going
for treatment.	
For further emerger	ncy medical information call toll-free 1-877-424-7452.
NOTE TO PHYSIC	CIAN: Malathion is an acetyl cholinesterase inhibitor. Atropine is antidotal.
Contains petroleum	distillate. May pose an aspiration pneumonia hazard.

#### SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE, WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY.

EPA Reg. No.



9779-5

EPA Est. No.

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# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING**: Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### Personal Protective Equipment:

Some materials that are chemical-resistant to this product are Barrier Laminate, Butyl Rubber, Nitrile Rubber or Viton.

Mixers, loaders, applicators, flaggers and other handlers must wear:

- protective eyewear
- long-sleeved shirt and long pants,
- shoes plus socks,
- chemical resistant gloves,
- chemical resistant hat (for air blast applications), and
- chemical resistant apron (for mixing & loading ULV formulations).

#### **User Safety Requirements:**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### Engineering Controls:

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators.

#### USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic organisms, including fish and invertebrates. This product may contaminate water through drift of spray in wind. This product has a high potential for runoff after application. Use care when applying in or to an area which is adjacent to any body of water, and do not apply when weather conditions favor drift from target area. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. In citrus, stone fruit, pome fruit and tree nuts: Do not apply this product within 3 days prior to bloom, during bloom, or until petal fall is complete. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.** 

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Non-Target Organism Advisory: This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Reporting Ecological Incidents: To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-855-494-6343.

#### PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. This product is incompatible with oxidizing agents.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

**Reporting Ecological Incidents:** To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-855-494-6343.

**Endangered Species Protection Requirements:** It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <a href="http://www.epa.gov/espp/">http://www.epa.gov/espp/</a>, call 1-844-447-3813, or email <a href="http://www.epa.gov/espp/">ESPP@epa.gov</a>. You must use the Bulletin valid for the month in which you will apply the product.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or nurseries.

Do not enter or allow others to enter until sprays have dried.

#### PRECAUTIONS AND RESTRICTIONS

Do not apply this product through any type of irrigation system.

All ULV formulations must be packaged in closed mixing and loading systems.

ULV ground applications is permitted for pastures and rangeland use only.

Except when making applications to rice or other aquatic food use sites, do not apply this product when soil is saturated, or when a storm event likely to produce runoff from the treated area is forecasted (by NOAA/ National Weather Service, or other similar forecasting service) to occur within 48 hours following application.

Apply MALATHION 5 by either ground sprayers or by airplanes, mixing the MALATHION 5 in water to form an emulsion spray solution. To make the spray solution, half fill the spray tank with water, agitate, add the specified amount of MALATHION 5 and then fill the spray tank with water while still agitating. Continue to agitate during use.

The dosages given under DIRECTIONS FOR USE are the amounts of MALATHION 5 to be applied per acre treated per application. Where a dosage range is given, use the lower rate on small or young plants or with light insect infestations; use the higher rate on large or more mature plants or with heavy insect infestations. The hazards and precautions for handling MALATHION 5 in this container are equally applicable to it after dilution with water for spray application.

For non-ULV applications, apply the specified amount of MALATHION 5 in a minimum of 30 gallons of water per acre by ground and a minimum of 5 gallons of water per acre by air, unless otherwise specified within the Directions for Use. For ULV applications - field crops, apply the specified amount of MALATHION 5 in less than 2 gallons of water per acre. For aerial ULV applications – tree crops/orchards, apply the specified amount of Malathion 5 in less than 10 gallons of water per acre.

# Mandatory Spray Drift Management

#### SPRAY DRIFT MANAGEMENT

#### Manualory Spray Drift Management

#### Non-Ultra Low Volume (ULV) Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with the American Society of Agricultural & Biological Engineers Standard (ASABE S641).
- If the windspeed is 10 miles per hour or less, applicators must use <sup>3</sup>/<sub>4</sub> swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use full swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

#### Ultra-Low Volume (ULV) Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver fine or coarser droplets in accordance with the American Society of Agricultural & Biological Engineers Standard (ASABE S641).
- Applicators must use a full swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

#### Airblast Applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

#### Ground Boom Applications:

- Do not release spray at a height greater than 4 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with the American Society of Agricultural & Biological Engineers Standard 572 (ASABE S572).
- Do not apply when wind speeds exceed 10 mph at the application site.
- Do not apply during temperature inversions.

#### Additional Spray Drift Information:

**Droplet Size:** Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.

In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

**Wind Direction and Speed:** For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

**Temperature Inversion:** Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

#### **BUFFER ZONES TO WATER BODIES**

#### Non-ULV Ground Application (includes ground boom and airblast applications)

- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, wetlands, ponds, estuaries, and commercial fish ponds).
- You must follow the instructions for additional buffer distances beyond the 25 feet, as applicable, per the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <a href="http://www.epa.gov/espp/">http://www.epa.gov/espp/</a>, call 1-844-447-3813, or email <a href="http://www.epa.gov/espp/">ESPP@epa.gov</a>.

#### Non-ULV Aerial Application

- Do not apply within 50 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, wetlands, ponds, estuaries, and commercial fish ponds).
- You must follow the instructions for additional buffer distances beyond the 50 feet, as applicable, per the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <a href="http://www.epa.gov/espp/">http://www.epa.gov/espp/</a>, call 1-844-447-3813, or email <a href="http://www.epa.gov/espp/">ESPP@epa.gov</a>.

#### ULV Ground Application (ULV ground applications is permitted for pastures and rangeland use only)

• Do not apply within 50 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, wetlands, ponds, estuaries, and commercial fish ponds). This 50-foot buffer is in addition to the full swath displacement upwind that applicators must use at the downwind edge of the field.

#### **ULV Aerial Application**

• Do not apply within 100 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, wetlands, ponds, estuaries, and commercial fish ponds). This 100-foot buffer is in addition to the full swath displacement upwind that applicators must use at the downwind edge of the field.

#### **RESISTANCE MANAGEMENT**

For resistance management, Malathion 5 contains a Group 1B insecticide (or acaricide). Any (insect/mite) population may contain individuals naturally resistant to Malathion 5 and other Group 1B insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

• Rotate the use of Malathion 5 or other Group 1B insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.

- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist, certified crop advisors, and/or Winfield Solutions, LLC representative for any additional pesticide resistance management and/or integrated pest management recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact your Winfield Solutions, LLC representative.

#### POLLINATOR PROTECTION

#### Pollinator Best Management Practices

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <u>https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators</u>.

#### Managed Pollinator Protection Plans

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

#### How to Report Bee Kills

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at <u>beekill@epa.gov</u>. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: <u>http://npic.orst.edu/reg/state\_agencies.html</u>.

### **APPLICATION INSTRUCTIONS**

When an application rate range is given, use the higher rate under heavy pest pressure.

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Grapefruit, Lemons, Limes, Oranges, Tangerines	California Red Scale, Yellow Scale, Black Scale, Soft Scale, Citrocoloa Scale	1.5 pints (0.94 lb. ai.)	7	3	12 hours	30 days
Non ULV Application	Red Scale, Purple Scale	1.25 - 2.0 pints (0.78 – 1.25 lbs. ai.)				
For All States	Thrips	1.25 pints (0.78 lb. ai.)				
	blication Restriction	<b>is:</b> ays prior to bloom, duri	ng bloom, or until p	etal fall is complete.		
Grapefruit, Lemons, Limes, Oranges, Tangerines ULV Aerial Application Only For All States Use closed mixing and loading	California Red Scale, Yellow Scale, Black Scale, Soft Scale, Citrocoloa Scale, Red Scale, Purple Scale, Thrips	4.0 fl. oz. (0.156 lb. ai.)	7	3	12 hours	7 days
system.						

#### CUCURBITS

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Cucumbers	Aphids, Spider mites, Pickleworms	1.5 pints (0.94 lb. ai.)	1	2	24 hours	7 days
	Leaf miners	2.0 pints (1.25 lbs. ai.)				
	Cucumber beetles, Squash vine borers	2.75 pints (1.72 lbs. ai.)				
Pumpkins	Aphids, Cucumber Beetles, Leaf miners, Pickleworms, Spider mites, Squash vine borers	1.5 pints (0.94 lb. ai.)	1	2	12 hours	7 days
Summer Aphids, Squash Spider mites, Pickleworms	1.5 pints (0.94 lb. ai.)	1	3	24 hours	7 days	
	Leaf miners	2.0 pints (1.25 lbs. ai.)				

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CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
	Cucumber beetles, Squash vine borers	2.75 pints (1.72 lbs. ai.)				
Winter Squash	Aphids, Cucumber Beetles, Leaf miners, Pickleworms, Spider mites, Squash vine borers	1.5 pints (0.94 lb. ai.)	1	3	12 hours	7 days
Cantaloupes, Honeydew melons Watermelons	Aphids, Spider Mites, Leafhoppers, Pickleworms, Cucumber Beetle	1.6 pints (1.0 lb. ai.)	1	2	12 hours	7 days

#### FIELD CROPS

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Cotton Non ULV	Boll Weevil	2.0 - 4.0 pints (1.25 - 2.5 lbs. ai.)	7	2	2 days	7 days
Application	Desert Spider Mite, Cotton Aphid, Leafhoppers, White Flies, Cotton Leafworm, Brown Cotton Leafworm, Cotton Leaf Perforator, Thrips, Lygus Bugs	2.0 - 4.0 pints (1.25 - 2.5 lbs. ai.)				
	Fleahoppers	1.0 - 1.5 pints (0.625 - 0.94 lb. ai.)				
	Fall Armyworms, Grasshoppers, Garden Webworms	1.5 - 3.0 pints (0.94 - 1.88 lbs. ai.)				
Cotton ULV Aerial Application Only Use closed mixing and loading system.	Boll Weevil, Desert Spider Mite, Cotton Aphid, Leafhoppers, White Flies, Cotton Leafworm, Brown Cotton Leafworm, Cotton Leaf Perforator, Thrips, Lygus Bugs	31.2 fl. oz. (1.22 lbs. ai.)	7	2	2 days	7 days
	Fleahoppers	16.0 - 24.0 fl. oz. (0.625 - 0.94 lb. ai.)				
	Fall Armyworms, Grasshoppers, Garden Webworms	24.0 – 31.2 fl. oz (0.94 - 1.22 lbs. ai.)				

# FORAGE CROPS

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATI ON INTERVAL
Alfalfa, Clover	Armyworms	2.0 pints (1.25 lbs. ai.)	0	Alfalfa: 2 Clover: 4 (2/cutting)	12 hours	14 days
Non-ULV Application	Grasshoppers, Aphids, Leafhoppers, Lygus Bugs, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.5 – 2.0 pints (0.94 - 1.25 lbs. ai.)				
Additional Applica	ation Restrictions: alfa or clover in bloor	۰ ۳		I	1	
Alfalfa, Clover ULV Aerial Application Only Use closed mixing and loading system.	Armyworms, Grasshoppers, Aphids, Leafhoppers, Lygus Bugs, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	15.6 fl. oz. (0.61 lb. ai.)	0	Alfalfa: 2 Clover: 4 (2/cutting)	12 hours	14 days
Additional Application	ation Restrictions:	n.		I		
Grass, Grass Hay	Armyworms	2.0 pints (1.25 lbs. ai.)	0	4 (1/cutting)	12 hours	14 days
	Grasshoppers, Aphids, Leafhoppers, Lygus Bugs, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.5 – 2.0 pint (0.94 – 1.25 lbs. ai.)				
Pasture ULV Ground and Aerial Application Only Use closed mixing and loading system.	Armyworms, Grasshoppers, Aphids, Leafhoppers, Lygus Bugs, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	23.5 fl. oz. (0.92 lb. ai.)	0	2 (1/cutting)	12 hours	30 days
Rangeland Use limited to spot treatment only for grasshopper control.	Grasshopper	15.6 fl. oz. (0.61 lb. ai.)	0	1/cutting	12 hours	Not Applicable
ULV Ground and Aerial Application Only Use closed						
Use closed mixing and loading system.						

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#### **GRAIN CROPS**

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Barley	Cereal Leaf Beetle	1.0 - 1.5 pints (0.625 - 0.94 lb. ai.)	7	2	12 hours	7 days
Non ULV Application	English Grain Aphid, Greenbugs	1.5 pints (0.94 lb. ai.)				
	Armyworms	2.0 pints (1.25 lbs. ai.)				
	Grasshoppers, Aphids, Leafhoppers, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)				
	<b>plication Instructions</b> ers, make full coverage	to hatching areas wh	en nymphs are your	ig.		1
Barley ULV Aerial Application Only	Alfalfa Weevil Larvae, Armyworms, Cereal Leaf Beetle,	15.6 fl. oz. (0.61 lb. ai.)	7	2	12 hours	7 days
Use closed mixing and loading system.	English Grain Aphid, Greenbugs, Grasshoppers, Leafhoppers, Spider Mites, Spittlebug					
	Dication Instructions ers, make full coverage	i :: e to hatching areas wh	en nymphs are your	ng.		l
CROP	INSECTS	AMOUNT of	MINIMUM	MAXIMUM	REI	MINIMUM

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Corn (field)	Cereal Leaf Beetle	1.0 - 1.5 pints (0.625 - 0.94 lb. ai.)	7	2	12 hours	7 days
Non ULV Application	English Grain Greenbugs	1.5 pint (0.94 lb. ai.)			except 3 days for detasseling	
Armyworms	Armyworms	1.6 pints (1.0 lb. ai.)				
	Grasshoppers, Aphids, Leafhoppers, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.6 pints (1.0 lb. ai.)				
	plication Instruction ers, make full coverage	<b>s:</b> ge to hatching areas w	hen nymphs are yo	bung.		I
Corn (field) ULV Aerial Application Only	Alfalfa Weevil Larvae, Armyworms, Cereal Leaf Beetle, English Grain Aphid, Greenbugs, Grasshoppers, Leafhoppers, Spider Mites, Spittlebug	15.6 fl. oz. (0.61 lb. ai.)	7	2	12 hours except 3 days for detasseling	7 days

Additional Application Instructions: For grasshoppers, make full coverage to hatching areas when nymphs are young.

Corn (sweet)	Japanese beetles	1.6 pints (1.0 lb. ai.)	5	3	12 hours	5 days
Non ULV Application					except 3 days for detasseling	
Injury may occur in the whorl or to the silks.						
Corn (sweet)	Japanese beetles	15.6 fl. oz. (0.61 lb. ai.)	5	3	12 hours	5 days
ULV Aerial Application Only					except 3 days for detasseling	
Injury may occur in the whorl or to the silks.						
Oats, Wheat	Cereal Leaf Beetle	1.0 – 1.5 pints (0.625 - 0.94 lb. ai)	7	2	12 hours	7 days
Non ULV Application	English Grain Greenbugs	1.5 pints (0.94 lb. ai)				
	Armyworms	1.6 pints (1.0 lb. ai.)				
	Grasshoppers, Aphids, Leafhoppers, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.6 pints (1.0 lb. ai.)				

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Oats, Wheat ULV Aerial Application Only Use closed mixing and loading system.	Alfalfa Weevil Larvae, Armyworms, Cereal Leaf Beetle, English Grain Aphid, Greenbugs, Grasshoppers, Leafhoppers, Spider Mites, Spittlebug	15.6 fl. oz. (0.61 lb. ai.)	7	2	12 hours	7 days
	lication Instruction	<b>s:</b> ge to hatching areas	when nymphs are y	/oung.		
Rice	Rice leaf miners.	2.0 pints (1.25 lbs. ai.)	7	2	12 hours	7 days
Non ULV Application	Rice stink bugs.	1.0 - 1.5 pints (0.625 - 0.94 lb. ai.)				
For rice leaf min apply by airplan Additional App Broadcast use of	e in 2 gallons of wate <b>lication Restriction</b> only over intermittent	cation shortly after th er per acre during the	e early milk and dou plication may not b	ugh stage of growing e made around bodie	rice. es of water where	fish or shellfish
Rice	Rice leaf miners.	15.6 fl. oz. (0.61 lb. ai)	7	2	12 hours	7 days

		45.0.5				
ULV Aerial Application Only	Rice stink bugs.	15.6 fl. oz. (0.61 lb. ai)				
Use closed mixing and loading system.						
For rice leaf mi		<b>ns:</b> ication shortly after th ter per acre during the				rice stink bugs,
Broadcast use	plication Restriction only over intermitten or harvested comme	<b>ns:</b> tly flooded areas. Ap rcially. A 24-hour hol	plication may not b ding time is required	e made around bodio d before floodwaters	es of water where may be released	fish or shellfish after treatment to
Rye	Cereal Leaf Beetle	1.0 - 1.5 pints (0.625 - 0.94 lb. ai.)	7	2	12 hours	7 days
Non ULV Application	English Grain Greenbugs	1.5 pints (0.94 lb. ai.)				
	Armyworms	1.6 pints (1.0 lb. ai.)				
	Grasshoppers, Aphids, Leafhoppers, Spider Mites, Alfalfa Weevil Larvae, Spittlebug	1.6 pints (1.0 lb. ai.)				
	plication Instruction ers, make full covera	<b>is:</b> ge to hatching areas	when nymphs are y	/oung.	1	
Rye ULV Aerial Application Only Use closed mixing and	Alfalfa Weevil Larvae, Armyworms, Cereal Leaf Beetle, English Grain Aphid, Greenbugs, Grasshoppers,	15.6 fl. oz. (0.61 lb. ai.)	7	1	12 hours	NA
loading	Grassnoppers,					

#### NUT CROP

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Pecans	Aphids, European red mite, Pecan phylloxera, Pecan budmoth, Pecan leaf casebearer, Pecan nut casebearer, Spider mite, Walnut aphid, Walnut husk fly	4.0 pints (2.5 lbs. ai.)	7	2	24 hours	7 days

Additional Application Instructions: Application rate is based on a standard of 500 gallons of dilute spray per acre for mature trees 25 to 35 feet high. Apply when buds begin to develop. For control of pecan nut casebearer and walnut husk fly apply after first generation eggs begin to hatch.

#### Additional Application Restrictions:

Do not apply this product within 3 days prior to bloom, during bloom, or until petal fall is complete.

#### **VEGETABLES AND FRUITS** (except citrus, cucurbits and root crops)

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Beans: Dry, Lima, Snap, ULV Aerial Application Only Use closed mixing and loading system.	Mexican Bean Beetles, Leafhoppers, Aphids, Cucumber Beetles, Bean Leaf Beetles, Blister Beetles, Lygus Bugs, Spider Mites, Japanese Beetles	15.6 fl. oz. (0.61 lb. ai.)	1	2	12 hours	7 days
Broccoli	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	2	2	2 days	7 days
	Imported Cabbage Worms, Diamond-Back Moth Larvae and Adults	2.0 pints (1.25 lbs. ai.)				
	Cabbage Loopers	1.0 – 2.0 pints (0.625 - 1.25 lbs. ai.)				
Brussels Sprouts	Aphids	1.5 – 2.0 pints (0.94 - 1.25 lbs. ai.)	2	2	2 days	7 days
	Imported Cabbage Worms, Diamond-Back Moth Larvae and Adults	2.0 pints (1.25 lbs. ai.)				
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				
Cabbage	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	7	3	2 days	7 days
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				
	Diamond-Back Moths	2.0 pints (1.25 lbs. ai.)				
Cauliflower	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	2	2	2 days	7 days
	Imported Cabbage Worms, Diamond-Back Moth Larvae and Adults	2.0 pints (1.25 lbs. ai.)				
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				
Celery To be applied to fresh leaves and stalks only.	Aphids, Spider Mites	2.4 pints (1.5 lbs. ai.)	7	2	24 hours	7 days
Cherries* Non ULV Application	Black Cherry Aphid Fruit Tree Leafroller	0.7 pints /100 gal. (0.44 lb. ai.)	3	4	12 hours	3 days

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
*Not registered in California	Cherry Fruit Fly Japanese Beetle Eyespotted Bud Moth	0.7 pints /100 gal. (0.44 lb. ai.)				
The non ULV app Injury may occur	on sweet cherries, p	e on cherries are based o articularly in Idaho, Oreg			lute spray for ı	mature trees.
Do not apply mor		: /e ingredient (2.8 pints o per year. Do not apply th				
Cherries, Sweet* ULV Aerial Application Only Use closed mixing and loading system. *Not registered in California	Black Cherry Aphid Fruit Tree Leafroller Cherry Fruit Fly Japanese Beetle Eyespotted Bud Moth	31.2 fl. oz. (1.22 lbs. ai.)	1	4	12 hours	7 days
Injury may occur Additional Appl Do not apply more	ication Restrictions	articularly in Idaho, Oreg	f actual MALATHIC	N 5) per acre per ap	plication. Do m, during bloc	not apply more m, or until petal
Cherries, Tart* ULV Aerial Application Only Use closed mixing and loading system. *Not registered	Black Cherry Aphid, Fruit Tree Leafroller, Cherry Fruit Fly Japanese Beetle, Eyespotted Bud Moth	31.2 fl. oz. (1.22 lbs. ai.)	1	6	12 hours	7 days
Do not apply mor		: /e ingredient (1.9 pints o e per year.  Do not apply				
Collards	Aphids, Imported Cabbage Worms, Diamond-Back Moth Larvae and Adults	1.6 pints (1.0 lb. ai.)	7	3	12 hours	7 days
	Harlequin Cabbage Bugs	1.0 pint (0.625 lb. ai.)				
	Cabbage Loopers	1.0 – 1.6 pints (0.625 - 1.0 lb. ai.)				
Dandelions	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	7	2	24 hours	7 days
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				
	Diamond-Back Moths	2.0 pints (1.25 lbs. ai.)				

	1	1	1	1	1	15
CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Eggplant	Aphids, Spider Mites	1.0 pint (0.625 lb. ai.)	3	4	12 hours	5 days
	Lacebugs	2.5 pints (1.56 lbs. ai.)				
Endive	Aphids, Spider Mites	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	7	2	24 hours	7 days
Garlic, Shallots	Aphids, Thrips	1.5 - 2.5 pints (0.94 - 1.56 lbs. ai.)	3	2	24 hours	7 days
Kale	Aphids	1.5 - 1.6 pints (0.94 - 1.0 lb ai.)	7	3	12 hours	5 days
	Cabbage Loopers	1.0 - 1.6 pints (0.625 -1.0 lb. ai.)				
	Diamond-Back Moths	1.6 pints (1.0 lb. ai.)				
Kohlrabi	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	3	2	24 hours	7 days
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				
	Diamond-Back Moths	2.0 pints (1.25 lbs. ai.)				
Leeks	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	3	2	24 hours	7 days
	Onion maggot flies, Thrips	2.5 pints (1.56 lbs. ai.)				
Lettuce	Leafhoppers, Aphids	2.0 pints (1.25 lbs. ai.)	14	2	24 hours	5 days – leaf 6 days – head
	Cabbage Loopers	3.0 pints (1.88 lbs. ai.)				
Mustard Greens	Aphids, Flea Beetles	1.5 - 1.6 pints (0.94 - 1.0 lb. ai)	7	3	12 hours	5 days
	Cabbage Loopers	1.0 – 1.6 pints (0.625 - 1.0 lb. ai.)				
	Diamond-Back Moths	1.6 pints (1.0 lb. ai.)				
Onions	Onion maggots	1.5 – 2.5 pints (0.95 - 1.56 lbs. ai.)	3	2	12 hours	7 days
	Onion thrips	1.5 – 2.0 pints (0.95 - 1.25 lbs. ai.)				
Parsley	Aphids	1.5 - 2.4 pints (0.95 - 1.5 lbs. ai.)	7	2	24 hours	7 days
	Cabbage Loopers	1.0 – 2.4 pints (0.625 - 1.5 lbs. ai.)				
	Diamond-Back Moths	2.4 pints (1.5 lbs. ai.)				

CROP	INSECTS	AMOUNT of	MINIMUM	MAXIMUM	REI	16 MINIMUM
	CONTROLLED	MALATHION 5 TO APPLY PER ACRE	PREHARVEST INTERVALS (DAYS)	APPLICATIONS PER YEAR		APPLICATION INTERVAL
Peas	Pea Weevil	1.6 pints	3	2	12 hours	7 days
Do not feed treated vines/forage to livestock or allow livestock to graze in treated fields.		(1.0 lb. ai.)				
Peppers	Aphids	1.0 pint (0.625 lb. ai.)	3	2	12 hours	5 days
	Pepper maggots	2.5 pints (1.56 lbs. ai.)				
Spinach	Aphids	1.6 pints (1.0 lb. ai.)	7	2	12 hours	7 days
Swiss Chard	Aphids	1.5 – 1.6 pints (0.94 - 1.0 lb. ai.)	14	2	12 hours	7 days
	Cabbage Loopers	1.0 – 1.6 pints (0.625 - 1.0 lb. ai.)				
	Diamond-Back Moths	1.6 pints (1.0 lb. ai.)				
Tomatoes (outdoors)	Spider Mites	1.5 pints (0.94 lb. ai.)	1	4	12 hours	5 days
	Aphids	1.0 pint (0.625 lb. ai.)				
	Drosophila	2.5 pints (1.56 lbs. ai.)				
	Armyworms, Fruitworms (California only)	2.5 pints (1.56 lbs. ai.)				
Turnips	Aphids	1.5 - 2.0 pints (0.94 - 1.25 lbs. ai.)	1	2	12 hours	5 days for turnip greens
	Cabbage Loopers	1.0 - 2.0 pints (0.625 - 1.25 lbs. ai.)				7 days for turnip root
	Diamond-Back Moths	2.0 pints (1.25 lbs. ai.)				
Watercress	Aphids	1.0- 1.9 pints (0.625 - 1.19 lbs. ai.)	3	5	≤1.6 pints/acre 12 hours	3 days
	Cabbage Loopers	1.0 - 1.9 pints (0.625 - 1.19 lbs. ai.)			>1.6	
	Diamond-Back Moths	2.0 pints (1.25 lbs. ai.)			pints/acre 24 hours	
	lication Restrictions en water is on the fiel	d. Do not irrigate until 2	4 hours after applic	ation.		
Peppermint Spearmint	Aphids, Flea beetles, Leafhoppers, Spider mites	1.3 pints (0.84 lb. ai.)	7	2	12 hours	7 days

#### **ROOT CROPS**

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL	
Beets (garden) Not for use on Sugar Beets.	Aphids	1.5 – 2.0 pints (0.94 - 1.25 lbs. ai.)	7	2	12 hours	7 days	
Horseradish, Parsnips, Salsify	Aphids	1.5 – 2.0 pints (0.94 - 1.25 lbs. ai.)	7	2	24 hours	7 days	
Potatoes (see below for sweet	Aphids, Leafhoppers, Mealybugs	1.0 pint (0.625 lb. ai.)	0	0	0 2	12 hours	7 days
potatoes)	False Chinch Bugs	1.5 pints (0.94 lb. ai.)					
	Grasshoppers	2.0 pints (1.25 lbs. ai.)					
Radishes	Aphids	1.6 pints (1.0 lb. ai)	7	2	12 hours	7 days	
Rutabagas	Aphids	1.6 pints (1.0 lb. ai)	7	2	12 hours	7 days	
Sweet Potatoes	Leafhoppers	1.5 – 2.0 pints (0.94 - 1.25 lbs. ai.)	0	2	12 hours	7 days	
	Morningglory Leafhoppers	2.5 pints (1.56 lbs. ai.)					

#### **MISCELLANEOUS CROPS**

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Grapes	Leafhoppers, Spider mites, European Fruit Lecanium	3.0 pints (1.88 lbs. ai.)	3	2	24 hours except 3 days for girdling and tying	14 days
	Mealybugs Apply in 50-100 gallons of water	1-1/2 pints (0.94 lb. ai.)				
Unless otherwise on grapes of Alm	eria, Cardinal, Italia	use on grapes are ba and Riberia varieties	when sprays conta	of 200 gallons per act ining MALATHION 5 a ver vines, usually sho 2	are applied afte	r clusters appear.
Mushrooms Make thorough applications as soon after picking as possible. Do not apply by air.	Spider Mites Mites, Phorid and Sciarid flies	(0.625 lb. ai.) 2.5 pints (1.56 lbs. ai.) in 130 gallons of water; or, 2 tablespoons in 3 gallons of water per 1000 square feet of bed	1	4	12 hours	7 days
Okra	Aphids	1.5 pints (0.94 lb. ai)	1	4	12 hours	7 days
Do not apply after pods start to form.	Japanese beetles	1.9 pints (1.19 lbs. ai.)				

						18
Strawberries	Aphids, Spider Mites, Field crickets, Lygus bugs, Spittle-bugs, Thrips, Potato leafhoppers, Strawberry leafrollers, Strawberry root weevils, Whiteflies	1.5 - 3.2 pints (0.94 - 2.0 lb. ai.)	3	4	12 hours	7 days

#### **ORNAMENTALS – OUTDOOR ONLY**

#### **Pollinator Best Management Practices**

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <u>https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators</u>.

#### Restrictions

- For all use sites:
  - Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, wetlands or natural ponds, estuaries and commercial fish farm ponds).
  - Do not apply directly to or allow the product to enter sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
  - Do not allow the product to enter any drain during or after application.
  - Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios.
  - Do not apply to vertical surfaces directly above pervious or impervious surfaces that drain into ditches, storm drains, gutter, or surface waters.
  - Do not apply or irrigate to the point of runoff.

#### • For nurseries:

- Aerial application is prohibited.
- Apply by ground application only.
- Do not apply this product when soil is saturated, or when a storm event likely to produce runoff from the treated area is forecasted (by NOAA/National Weather Service, or other similar forecasting service) to occur within 48 hours following application.
- Do not apply when the wind speed is greater than 10 mph.
- Applicators are required to select the nozzle and pressure that deliver medium or coarser droplets (ASABE S572).

#### • For other use sites:

- Spot treatment only.
- Do not apply this product when a storm event likely to produce runoff from the treated area is forecasted (by NOAA/National Weather Service, or other similar forecasting service) to occur within 24 hours following application.

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
Herbaceous plants, Ornamental trees, Woody	Lace bugs, Oyster shell scale	1.0 pints/100 gallons of water	Not applicable	2	12 hours	Nurseries: 7 days
shrubs, Vines.		(0.16 fl. oz. per 1 gallon of water)				Other Use Sites: 10 days

CROP	INSECTS CONTROLLED	AMOUNT of MALATHION 5 TO APPLY PER ACRE	MINIMUM PREHARVEST INTERVALS (DAYS)	MAXIMUM APPLICATIONS PER YEAR	REI	MINIMUM APPLICATION INTERVAL
	Aphids, Spider mites, Whitefly, Mealybugs, Thrips, Japanese beetle adults, Four-lined leaf bug, Tarnished plant bug, Rose leafhopper, Potato leafhopper, European pine shoot moth, Scurfy scale, Euonymus scale.	1.5 pints/100 gallons of water (0.24 fl. oz. per 1 gallon of water)				
	Bagworms, Tent caterpillar, Birch leaf miner, Boxwood leaf miner, Oak kermes, Juniper scale, Fletcher scale, Florida red scale, Azalea scale, Magnolia scale, Pine leaf scale.	2.0 pints/100 gallons of water (0.32 fl. oz. per 1 gallon of water)				
	Soft brown scale, Monterey pine scale, Black scale	2.5 pints/100 gallons of water (0.40 fl. oz. per 1 gallon of				
	Crawlers	water)				
	Pine needle scale	4.0 pints/100 gallons of water				
		(0.64 fl. oz. per 1 gallon of water)				

certain ferns, including Boston, Maidenhair and Pteris, as well as some species of crassula.

#### **GRAIN STORAGE** (Grain Elevators & Silos)

Restricted Entry Interval (REI): 12 hours.

For the protection of the following stored grains: wheat, oats, corn, rye and barley. To control confused flour beetle, rice weevil, granary weevil, saw-toothed grain beetle, flat grain beetle, red flour beetle, rusty grain beetle, lesser grain borer, Indian meal moth and cereal leaf beetle, apply MALATHION 5 to walls, floors and machinery in grain elevators, and grain bins before loading grain. Mix one (1) gallon of MALATHION 5 with 25 gallons of water and spray surfaces to point of run-off. Maximum application rate is 0.6 lb ai (15.4 fl. oz. formulate product) per 1000 sq. ft. Make only 1 application per storage period. Clean elevators and bins thoroughly before applying spray. Remove and burn all sweepings and debris. Do not apply directly to grain.

# STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE AND DISPOSAL.

#### STORAGE

**PESTICIDE STORAGE:** MALATHION 5 should be stored in the original unopened container in a secure dry place. Do not contaminate with other pesticides or fertilizers. The product should never be heated above 55° C (131° F), and should not be stored for long periods of time at a temperature in excess of 25° C (77° F). In the event of spillage or leakage, soak up material with absorbent clay, sand, sawdust, or other absorbent material. Scrape up and dispose of in accordance with information given under DISPOSAL.

#### DISPOSAL

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry.)

#### CONTAINER DISPOSAL:

**Nonrefillable containers equal to or less than 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank and drain for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable container greater than 5 gallons: Nonrefillable container.** Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container <sup>1</sup>/<sub>4</sub> full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure or accident, call CHEMTREC 1-800-424-9300

#### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND

SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

#### LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.